

PE EXTRACTION OF POSSIBLE SEMEN STAINS

A. SCOPE

A.1 In order to examine stains microscopically or to perform certain enzyme or antigen testing, components of the stain need to be extracted into a buffered solution by soaking, agitating, and centrifuging. Cell buttons may be stained with the Christmas Tree Stain to identify cellular components and/or supernatants may be used for p30 testing.

B. QUALITY CONTROL

Not applicable

C. SAFETY

C.1 Treat all biological samples as potentially infectious. Gloves, a face mask, eye protection (e.g. safety glasses or a face shield) and a lab coat must be worn.

C.2 Distinguish all waste as general, biohazard or sharps and discard appropriately.

D. REAGENTS, STANDARDS, AND CONTROLS

D.1 ABACard® p30 extraction buffer

D.1.1 This buffer may be used until depleted; however, it must be discarded on the expiration date. Storage will be according to the manufacturer's recommendations.

E. EQUIPMENT

E.1 ABACard® p30 extraction buffer

E.2 Vortex

E.3 Centrifuge

E.4 Ultrasonicator

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- E.5 Microcentrifuge tube
- E.6 Microscope slide
- E.7 Scalpel or scissors
- E.8 Hot plate at approximately 60°C

F. PROCEDURES

- F.1 Remove an approximate 2-mm² section of stain and place into a microcentrifuge tube.
- F.2 Add approximately 300 uL of the ABACard® p30 extraction buffer to the sample and vortex for 20 seconds.
- F.3 Allow sample to soak at room temperature for 30-60 minutes. This sample may soak overnight, not exceeding 24 hours.
- F.4 Ultrasonicate for 5-10 minutes. Vortex.
- F.5 Remove the substrate with a toothpick then centrifuge the sample at approximately 14,000 rpm for 3 minutes.
- F.6 Remove all but approximately 20 uL of supernatant to a clean tube. (Supernatant can later be used for p30 testing if desired.) Vortex or pipette up and down to resuspend the cell button and place a portion of this onto a clean labelled microscope slide.
- F.7 Fix cells to the microscope slide by incubating on an approximately 60°C hot plate for 10 minutes.

G. INTERPRETATION GUIDELINES

Not applicable

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H. REFERENCES

H.1 *A Compendium of Forensic Science Methods*, The Forensic Sciences Foundation, Inc., Colorado, 1980, page 198-203

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